PATENT COOPERATION TREATY

PCT

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITYCT

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P4669.PC/PDW	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/GB2005/000627	International filing date (day/month/year) 21.02.2005	Priority date (day/month/year) 19.02.2004

International Patent Classification (IPC) or national classification and IPC

G06F17/30, H04M1/725

Applicant

QUALCOMM CAMBRIDGE LIMITED

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

   a. ☒ sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:

      ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

      ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

   b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

   ☒ Box No. I   Basis of the opinion

   ☐ Box No. II   Priority

   ☐ Box No. III   Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

   ☐ Box No. IV   Lack of unity of invention

   ☒ Box No. V   Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

   ☐ Box No. VI   Certain documents cited

   ☐ Box No. VII   Certain defects in the international application

   ☐ Box No. VIII   Certain observations on the international application

Date of submission of the demand 19.12.2005	Date of completion of this report 19.01.2006
Name and mailing address of the international preliminary examining authority: European Patent Office - Gitschiner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840	Authorized Officer Bowler, A Telephone No. +49 30 25901-448

Box No. I   Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

    ☐   This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:

        ☐   international search (under Rules 12.3 and 23.1(b))
        ☐   publication of the international application (under Rule 12.4)
        ☐   international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-45   as originally filed

Claims, Numbers

1-12   filed with telefax on 19.12.2005

Drawings, Sheets

1/5-5/5   as originally filed

    ☐   a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing

3. ☐   The amendments have resulted in the cancellation of:

        ☐   the description, pages
        ☐   the claims, Nos.
        ☐   the drawings, sheets/figs
        ☐   the sequence listing *(specify)*:
        ☐   any table(s) related to sequence listing *(specify)*:

4. ☐   This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

        ☐   the description, pages
        ☐   the claims, Nos.
        ☐   the drawings, sheets/figs
        ☐   the sequence listing *(specify)*:
        ☐   any table(s) related to sequence listing *(specify)*:

   *   *If item 4 applies, some or all of these sheets may be marked "superseded."*

| Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |

1. Statement

Novelty (N)	Yes:	Claims	
	No:	Claims	1-12
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-12
Industrial applicability (IA)	Yes:	Claims	1-12
	No:	Claims	

2. Citations and explanations (Rule 70.7):

   see separate sheet

Re Item V.

1.   Reference is made to the following documents:

D1 :   WO 02/093877 A (NOKIA CORPORATION; NOKIA INC) 21 November 2002
(2002-11-21)

D2 :   US 2002/078143 A1 (DE BOOR ADAM ET AL) 20 June 2002 (2002-06-20)

It is noted that in the previous communication the references to D1 and D2 were
inadvertently reversed.

1.1   D6:   Newly cited reference: "New Gold Rush: Trigenix to release its Mobile Interface
products also for MS Smartphone in year 2004" 28-11-2003
http://www.msmobiles.com/news.php/1713.html

2. CLARITY

The term "ACTOR" used in claims 1-12 is vague and unclear and leaves the reader in
doubt as to the meaning of the technical features to which it refers, thereby rendering the
definition of the subject-matter of said claims unclear, Article 6 PCT.

3.   INDEPENDENT CLAIM 1 and INDEPENDENT CLAIM 8

3.1   The present application does not meet the criteria of Article 33(1) PCT, because the
subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

Document D6 discloses (the references in parentheses applying to this document):

3.2. A method of rendering a user interface for a device,

(home screen or "trig";page 1, lines 6-7)

the method comprising the steps of;

providing a plurality of actors (par. 2: trigplayer; a high performance compact application
which allows trigs to be installed and updated over the air)

each of the plurality of actors being associated with a **respective** user interface element
(par. 2, handset software components e.g. phone, messaging, contacts, calendar)

and comprising one or more attributes defining the **appearance and the functionality** of
the respective actor; (par. par. 2; branding of the user interface)

and **each actor attributes comprising markup language**

(see page 2, lines 2-9, e.g. TrigML)

providing a renderer to receive one or more attributes from one or more of the plurality of

actors; and rendering the user interface **solely** in accordance with the received attributes. (par. 3, Trigbuilder, a powerful tool for the rapid creation of a wide range of mobile user interfaces.)
Claim 8 is treated in like manner.

3.3   The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 8 is not new in the sense of Article 33(2) PCT.
Document D2 discloses (the references in parentheses applying to this document):
As briefly discussed in the Written Opinion, the following features of claim 8 are to be found in D2 as follows:

A device comprising user interface (figure 2) comprising one or more user interface elements (200, 212, 220 etc.)

a plurality of actors (figure 3, element 104: User Interface definition files)
each of the plurality of actors being associated with a respective user interface element (as set forth at par. 75 ,80)

and comprising one or more attributes defining the appearance and functionality of the respective actor (see paragraph 80; "the particular content of the user definition files is variable and ... define the user interface presented to the user, they allow the service operator to easily and quickly "brand " the wireless communications device.)
and each of the actor attributes comprising markup language (it also means that the service provider can customize and brand the user interface using simple markup language editing tools..)

and a renderer (figure 3, elements 112, 114, 116) being configured to interpret the attributes of the actor and to render the user interface solely in accordance with the actor attributes. (see paragraph 76: the browser provides the primary user interface mechanism to the user... par. 79: the browser 107 provides the basic user interface of the wireless communications device and is responsible for displaying content on the screen display 136 as defined by the user definition files 104.) Note the full description at paragraphs 70-88+.

3.4   Thus the elements of claim 8 are anticipated by D2. Likewise the method of claim 1

is deemed to be anticipated. These claims are not novel.

4.   Applicant's arguments:

4.1 Applicant argues that there is no explicit disclosure in D2 that the user interface definition files are associated with a respective user interface element. The examining division disagrees. See D2, paragraph 82. Any of the pages or content displayed on the screen display may be obtained locally from the user interface definition files 104 or from the WWW. Examples of local content include telephone book, received text messages, or messages being created for sending etc. (Compare to appendix B).

4.2 Applicants arguments are not deemed to be persuasive because the term "actors" is not clearly defined and therefore it cannot be argued that the user interface definition files are not equivalent to applicants actors. In any event the user interface files 104 are positively associated with a respective user interface element.

4.3 The claims as amended require that the actors are associated with a respective user interface element and comprising one or more attributes defining the appearance and functionality of the respective actor. That is if the actor is identified as in appendix B then the actor must have user interface definition files such as disclosed in D2 in order to render the user interface elements associated with each user interface screen.

4.4 Further, the arguments regarding the renderer of applicant's claims 1 and 8, e.g. that the user interface can be updated by the simple process of updating one or more attributes rather than using the content handler to send further data to the browser to render in accordance with user definition files, it is noted that there is no such recitation in either claim 1 or 8. Therefore this argument is moot.

4.5 Applicants argue that a reduction in hardware required to render a display enables the device to be smaller and to have lower power consumption. This would be true of D2 as well.

5.   DEPENDENT CLAIMS 2-7, 9-12

5.1 Dependent claims 2-7, 9-12 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect

of novelty and/or inventive step (Article 33(2) and (3) PCT).

5.2   Regarding updating function set forth in claims 2-5, such is disclosed in D6 as the trig server. Claims 6 and 7 are inherent to D6.

5.3   Further regarding claims 2-7 and 9-12:
D2 discloses:
Claim 2: A method according to claim 1, wherein if an actor attribute is updated, the update is received by the renderer and the user interface is updated accordingly.

(D2, par 155: "The step of updating the screen display 136 in the above described control flow, when done in the context of obtaining a new page for display, is accomplished by passing a URL to the shell 106 via the ShellGetURL function. FIG. 4 illustrates the URL history stack 108 used by the shell 106 to support URL processing. The URL history stack 108 is a LIFO stack.") Thus the update is received by the renderer.

Claim 3: A method according to claim 2, wherein the (an)(sic) actor attribute is updated in response to a user update. (D2 par. 245, figure 11; "the user can create a new entry, or go to a separate page to display all the parameters for a particular entry, and change them if she wishes.")

Claim 4: A method according to claim 2, wherein the updating of an attribute causes the formatting of a user interface element to change. (D2, par: 31: "For example, using a markup language to define the pages of the user interface allows any of the following items to be changed on any page: title bar presence and text; all informational text; option list text; links to all subsequent screens; soft key assignments; permanent scrolling banner messages; banner advertising; and help text.")

Claim 5: A method according to claim 2, wherein the updating of an attribute causes a user interface element to move within the user interface. (D2, par. 32: "Since the user interface is defined in markup language pages, service operator-specific logos, artwork, and text can be easily added and changed by individual service operators.") This is read as including moving within the page.

Claim 6: A method according to any preceding claim wherein the
actor attributes comprise mark-up language and the renderer is a mark-up language
renderer. (D2, par. 23: "To effect this, the present invention includes a markup language
browser that it uses to provide both telephony control of the wireless communication
device, in response to user selection of telephony functions in the user interface, and
Internet access via the HyperText Transport Protocol (HTTP), in response to user
selection of data items associated with content located on the Internet.")

Claim 7: data carrier comprising executable code. (see D2 par. 12: "Accordingly, it is
desirable to provide a software architecture for the MMI of a wireless communication
device that enables the customization and use of user interface with Web content
accounting for the limited screen resolution and input functionality of the wireless
communication device.")

Claims 9-12: define trivial details clearly found in D2.
Display means, communications interface, storage means and processing means
are clearly disclosed by D2. (D2, paragraph 71).

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CLAIMS

1. A method of rendering a user interface for a device, the
5 method comprising the steps of:
        providing a plurality of actors, each of the plurality
of actors being associated with a respective user interface
element and comprising one or more attributes defining the
appearance and the functionality of the respective actor and
10 each of the actor attributes comprising mark up language;
        providing a renderer to receive one or more attributes
from one or more of the plurality of actors; and rendering
the user interface solely in accordance with the received
actor attributes.
15

2. A method according to claim1, wherein if an actor
attribute is updated, the update is received by the renderer
and the user interface is updated accordingly.

20 3   A method according to claim 2, wherein the an actor
attribute is updated in response to a user update.

4. A method according to claim 2, wherein the updating of
an attribute causes the formatting of a user interface
25 element to change.

5. A method according to claim 2, wherein the updating of
an attribute causes a user interface element to move within
the user interface.
30

6. A method according to any preceding claim wherein the
renderer is a mark-up language renderer.

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7. A data carrier comprising computer executable code for performing the method of any of claims 1 to 6.

5 8. A device comprising a user interface, the user interface comprising one or more user interface elements; a plurality of actors, each of the plurality of actors being associated with a respective user interface element and comprising one or more attributes defining the appearance and the 10 functionality of the respective actor; and each of the actor attributes comprising mark up language; and a renderer, the renderer being configured, in use, to interpret the attributes associated with one or more of the plurality of actors and to render the user interface solely in accordance 15 with the actor attributes.

9. A device according to claim 8, wherein the device further comprises display means for displaying the user interface.
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10. A device according to claim 8 or claim 9, wherein the device further comprises a communications interface for receiving further actors for use in the rendering of the user interface.
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11. A device according to any of claims 8 to 10, wherein the device further comprises storage means configured to store the plurality of actors.

30 12. A device according to any of claims 8 to 11, wherein the device further comprises processing means configured to operate the renderer.